05026-US

App No.: NEW Docket No.: 1163-0560PUS1
Inventor: Nobuyoshi OKUMURA et al.
Title: RECEIVING APPARATUS
NEW SHEET Sheet 1 of 8

FIG.1

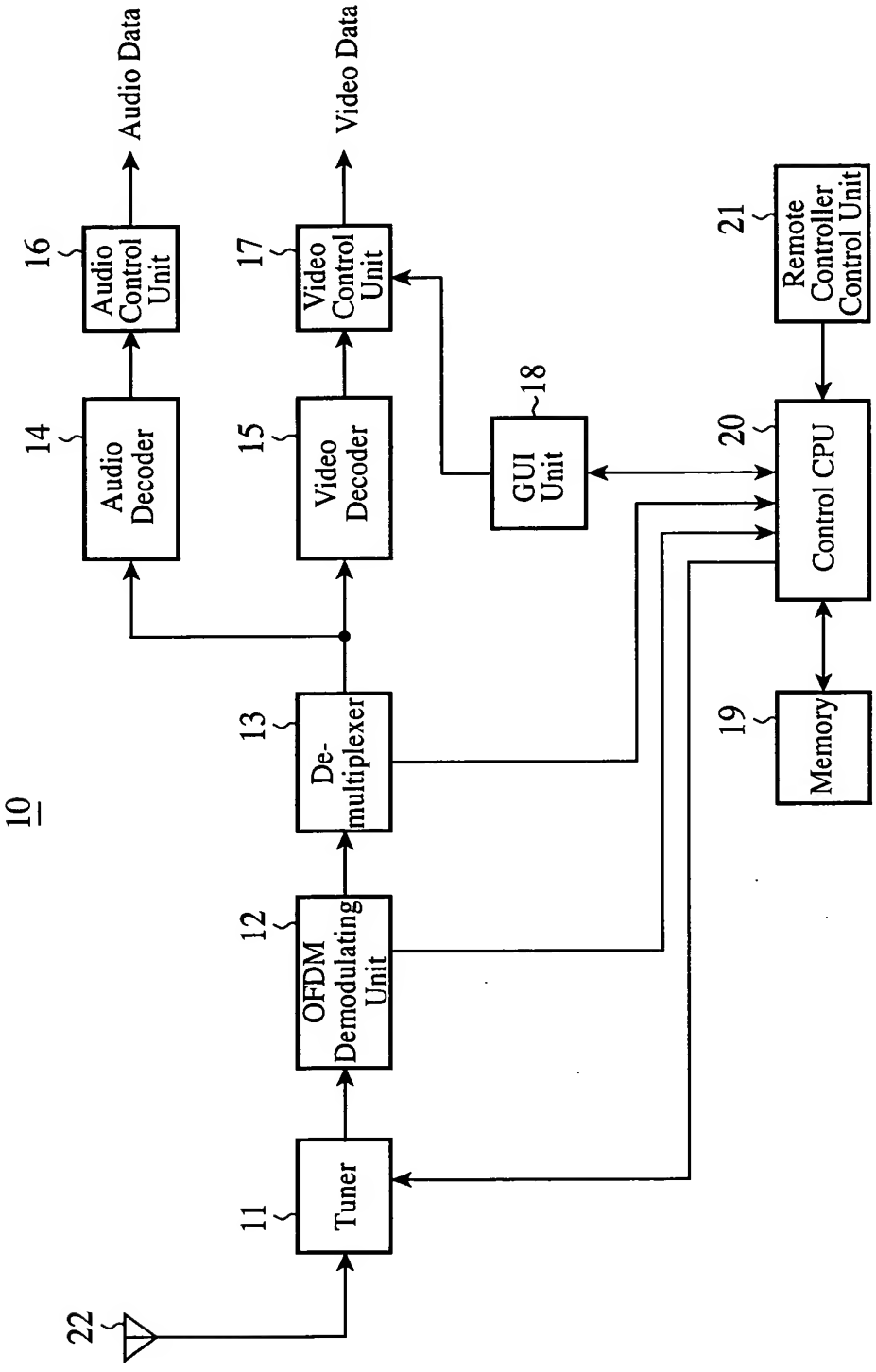


FIG.2

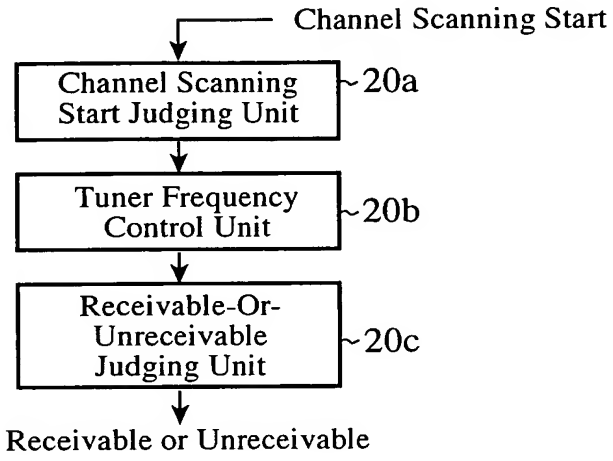

Channel Scanning Start
Channel Scanning Start Judging Unit
20a
Tuner Frequency Control Unit
20b
Receivable-Or-Unreceivable Judging Unit
20c
Receivable or Unreceivable

FIG.3

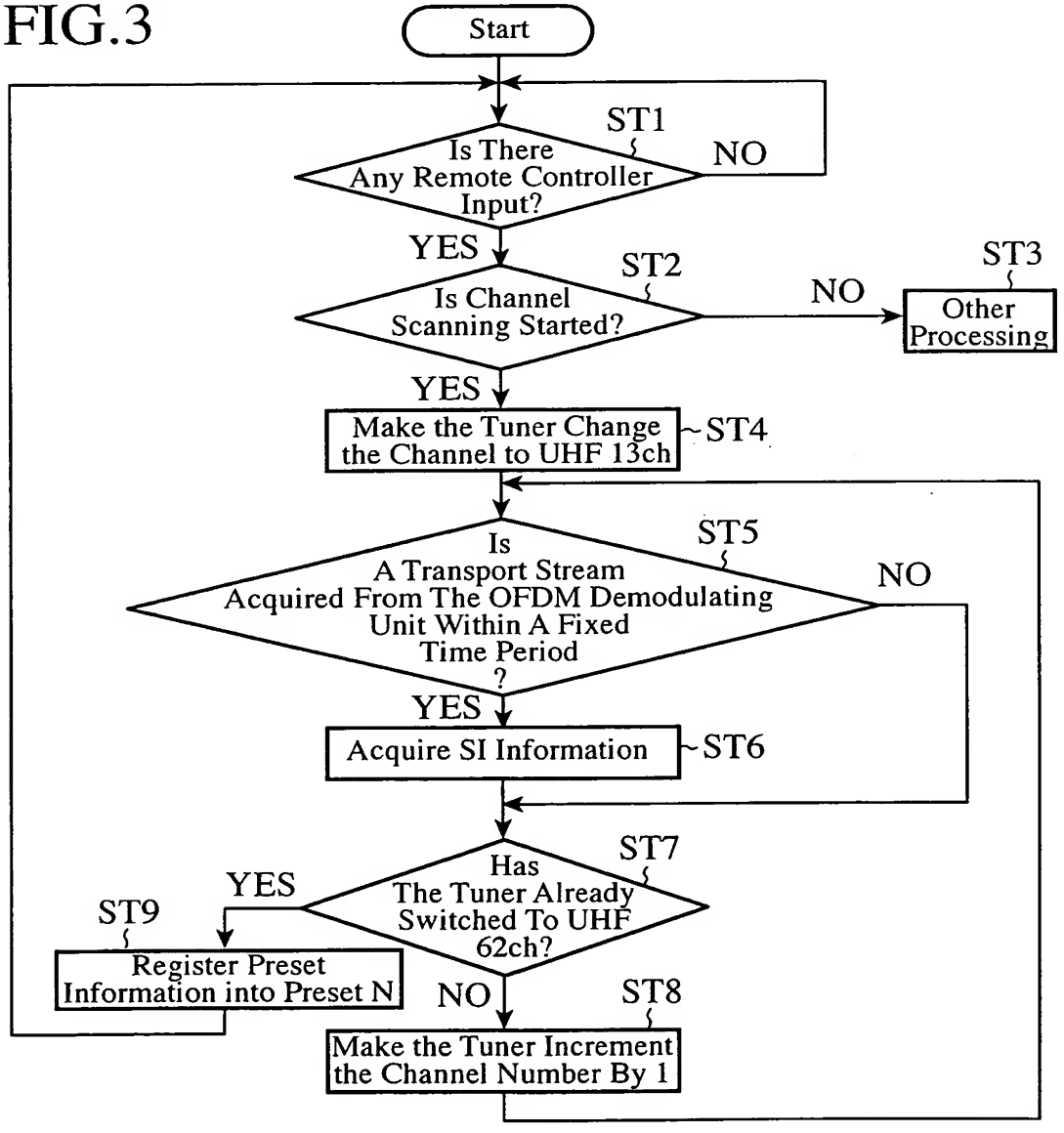

Start
ST1
Is There Any Remote Controller Input?
NO
YES
ST2
Is Channel Scanning Started?
NO
ST3
Other Processing
YES
Make the Tuner Change the Channel to UHF 13ch
ST4
ST5
Is A Transport Stream Acquired From The OFDM Demodulating Unit Within A Fixed Time Period ?
NO
YES
Acquire SI Information
ST6
ST7
Has The Tuner Already Switched To UHF 62ch?
YES
ST9
Register Preset Information into Preset N
NO
ST8
Make the Tuner Increment the Channel Number By 1

FIG.4

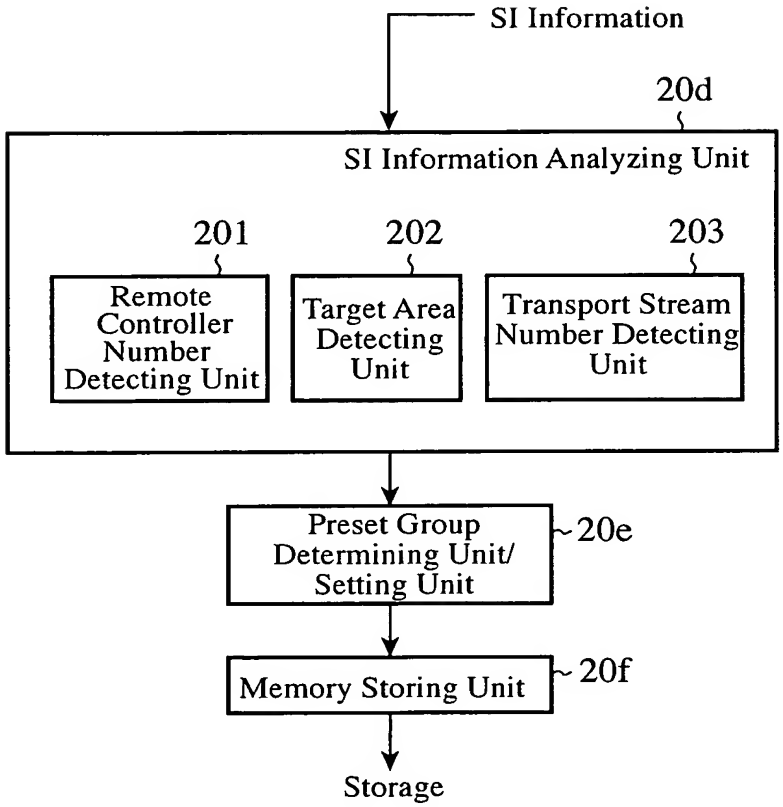

SI Information
20d
SI Information Analyzing Unit
201
202
203
Remote Controller Number Detecting Unit
Target Area Detecting Unit
Transport Stream Number Detecting Unit
Preset Group Determining Unit/ Setting Unit
20e
Memory Storing Unit
20f
Storage

FIG.5

(a)

Preset Group 1				
remote _control _key_id	Channel	Transport Stream Name	Transport Stream Id	Broadcast Target Area
1	UHF13	○×Broadcast	0x7EEE0	○○Prefecture
2	UHF18	◆▽Television	0x7EEE1	○○Prefecture
4	UHF25	Television▲△	0x7EEE3	○○Prefecture
6	UHF22	□○Broadcast	0x7EEE2	○○Prefecture
8	UHF16	◇×Television	0x7EEE5	○○Prefecture
10	UHF20	▼●Television	0x7EEE4	○○Prefecture

(b)

Preset Group 2				
remote _control _key_id	Channel	Transport Stream Name	Transport Stream Id	Broadcast Target Area
1	UHF14	Television●△	0x7CA0	××Prefecture
2	UHF19	○□Broadcast	0x7CA1	××Prefecture
4	UHF20	◇×Television	0x7CA3	××Prefecture
5	UHF26	□○Broadcast	0x7CA2	××Prefecture
6	UHF23	◇×Television	0x7CA4	××Prefecture

FIG.6

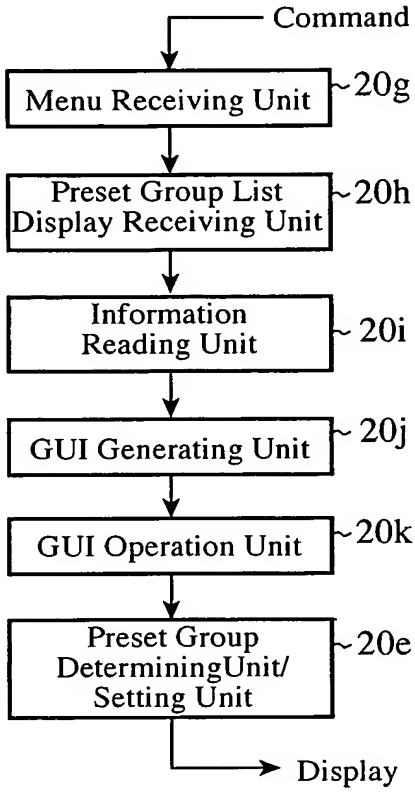

Command
Menu Receiving Unit
20g
Preset Group List Display Receiving Unit
20h
Information Reading Unit
20i
GUI Generating Unit
20j
GUI Operation Unit
20k
Preset Group DeterminingUnit/ Setting Unit
20e
Display

FIG.7

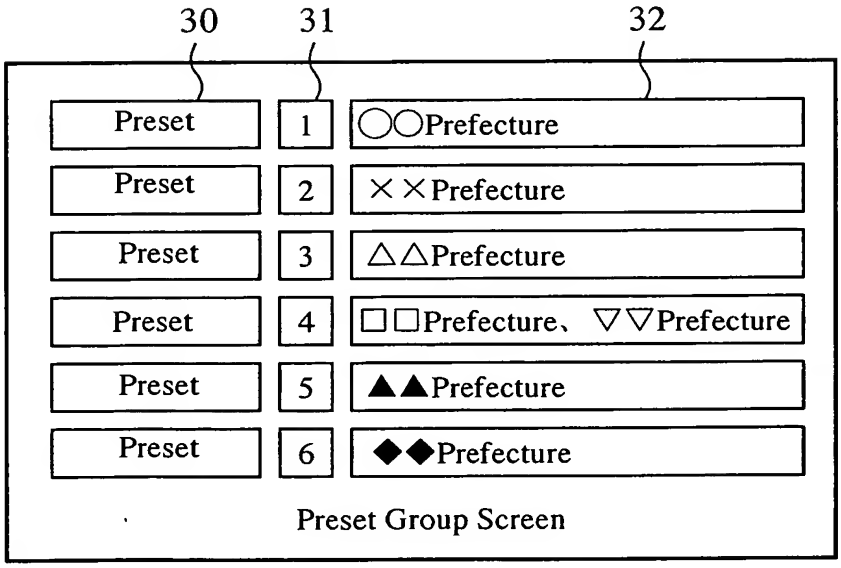

30
31
32
Preset
1
○○Prefecture
Preset
2
××Prefecture
Preset
3
△△Prefecture
Preset
4
□□Prefecture、▽▽Prefecture
Preset
5
▲▲Prefecture
Preset
6
◆◆Prefecture
Preset Group Screen

FIG.8

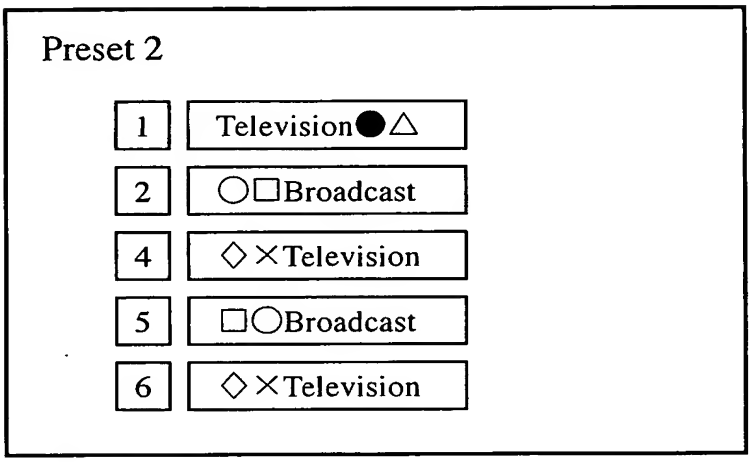

Preset 2
1
Television●△
2
○□Broadcast
4
◇×Television
5
□○Broadcast
6
◇×Television

FIG.9

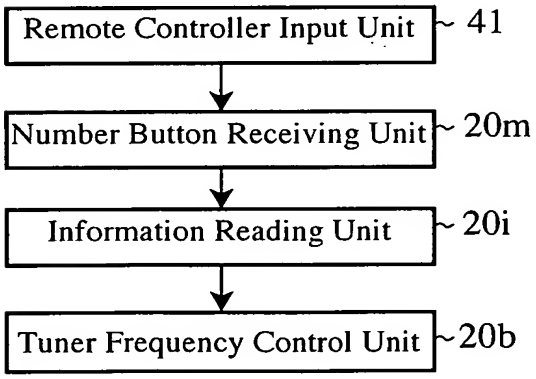

Remote Controller Input Unit
41
Number Button Receiving Unit
20m
Information Reading Unit
20i
Tuner Frequency Control Unit
20b

FIG.10

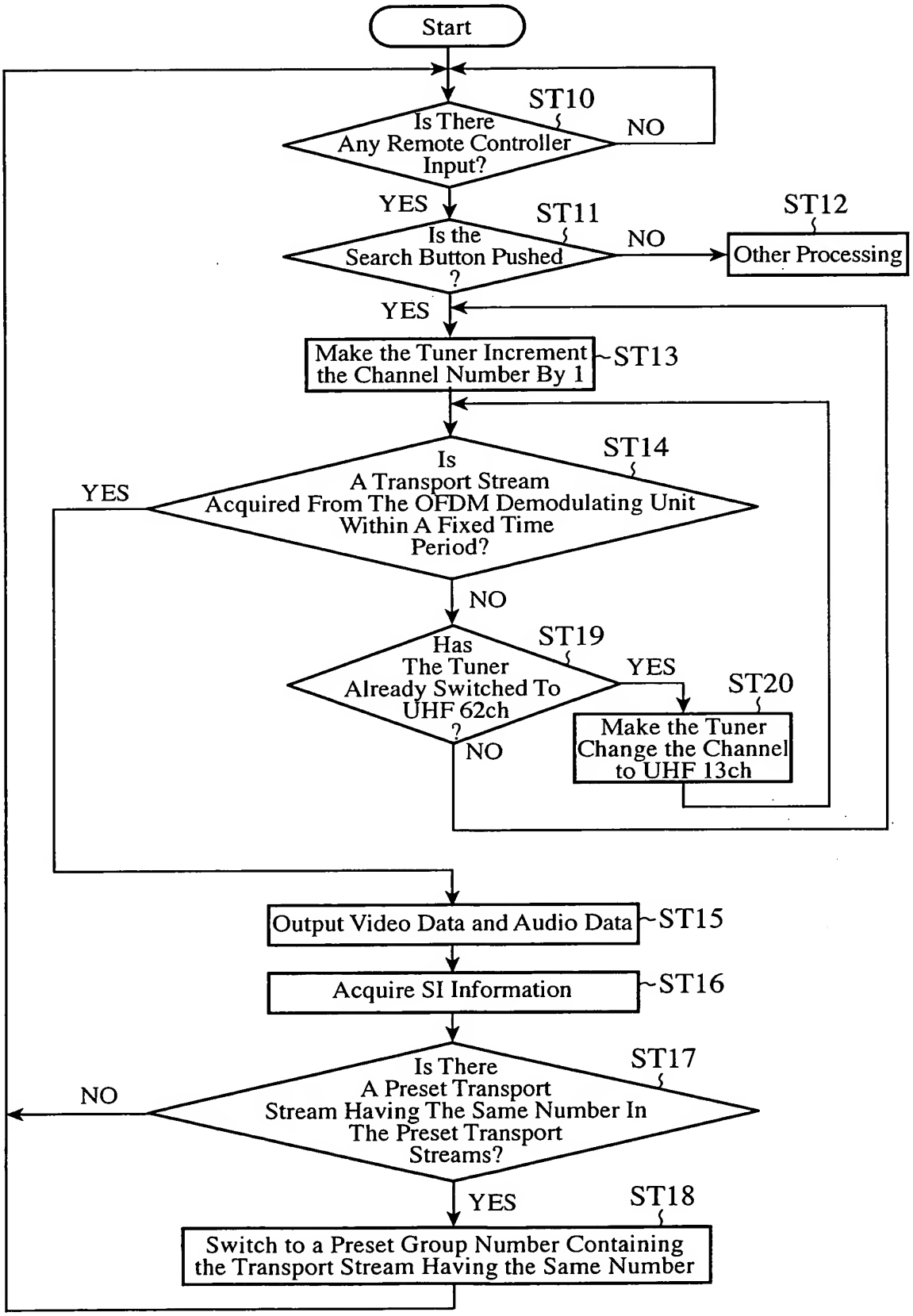
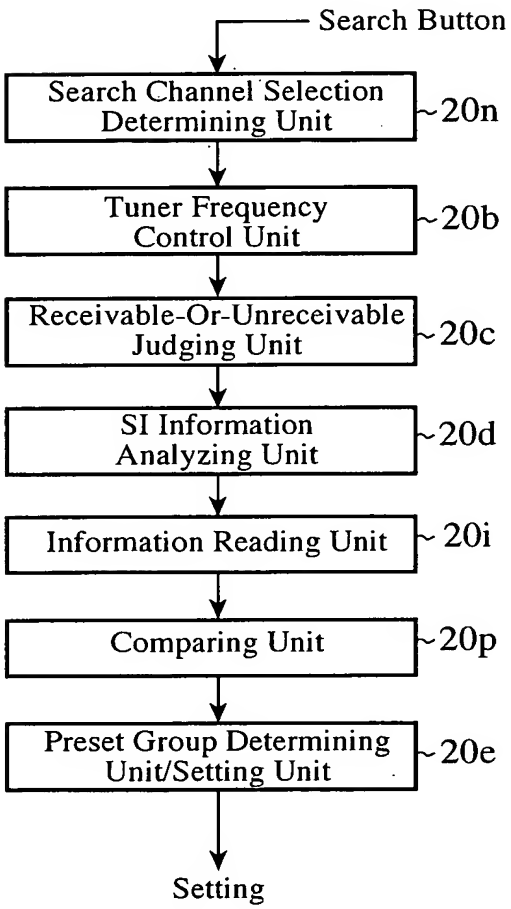

Start
ST10
Is There Any Remote Controller Input?
NO
YES
ST11
Is the Search Button Pushed ?
NO
ST12
Other Processing
YES
Make the Tuner Increment the Channel Number By 1
ST13
ST14
Is A Transport Stream Acquired From The OFDM Demodulating Unit Within A Fixed Time Period?
YES
NO
ST19
Has The Tuner Already Switched To UHF 62ch ?
YES
ST20
Make the Tuner Change the Channel to UHF 13ch
NO
Output Video Data and Audio Data
ST15
Acquire SI Information
ST16
ST17
Is There A Preset Transport Stream Having The Same Number In The Preset Transport Streams?
NO
YES
ST18
Switch to a Preset Group Number Containing the Transport Stream Having the Same Number

FIG.11


Search Button
Search Channel Selection Determining Unit
20n
Tuner Frequency Control Unit
20b
Receivable-Or-Unreceivable Judging Unit
20c
SI Information Analyzing Unit
20d
Information Reading Unit
20i
Comparing Unit
20p
Preset Group Determining Unit/Setting Unit
20e
Setting